



FOREIGN COMPARATIVE TESTING (FCT): LEVERAGING GLOBAL INVESTMENT IN TECHNOLOGY

**PRESENTATION TO 38TH ANNUAL NDIA AIR TARGETS,
UAVs, & RANGES DIVISION SYMPOSIUM
OCT 10-12, 2000**

Foreign Comparative Testing Program

3090 Defense, Pentagon Room 3E130

Washington, DC 20301-3090

Voice (703) 602-3740 / Fax (703) 602-3748

Linda.Palmer@osd.mil

<http://www.acq.osd.mil/sts/fct/>

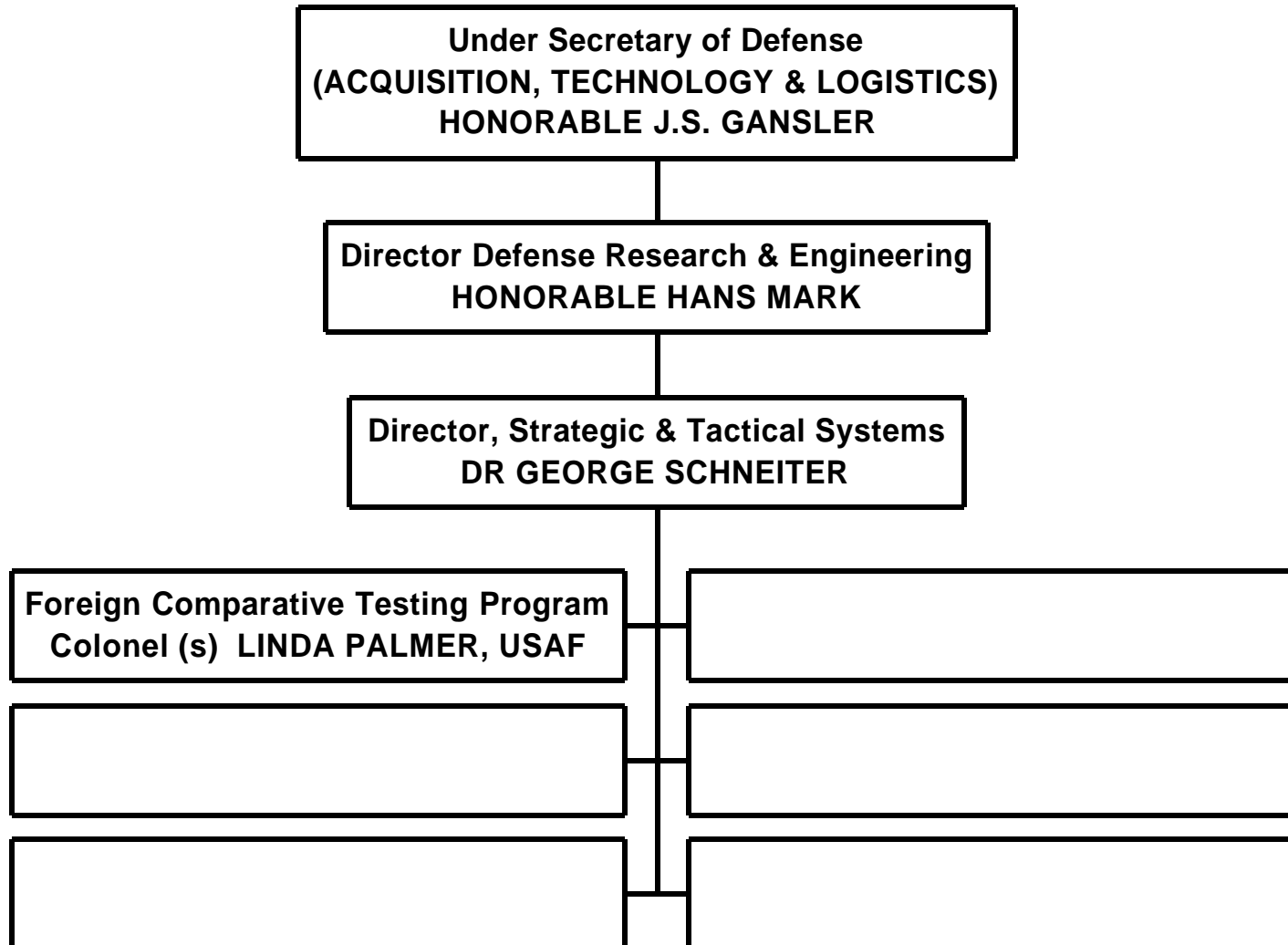
PURPOSE OF FCT PROGRAM

**Test and Evaluation
of
Foreign Non Developmental
Equipment that
Demonstrates Potential
to
Satisfy Sponsor Requirements**

FCT FACTS

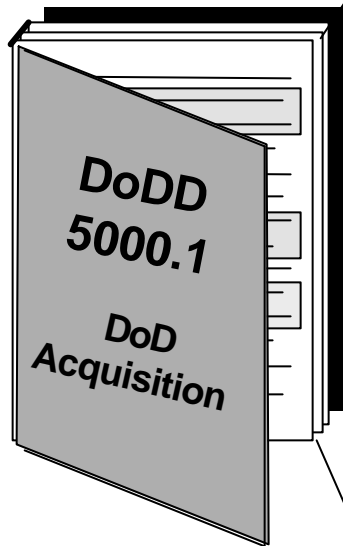
- **21 U.S. Allied and friendly countries have participated in the FCT program**
- **In 20 years:**
 - **416 projects started, 362 completed**
 - **196 successful evaluations**
 - **113 projects have resulted in U.S. procurements worth over \$5 billion in FY00 constant year dollars**

FCT ORGANIZATION IN OSD



FCT FITS

U.S. ACQUISITION GUIDANCE



2. ACQUIRING QUALITY PRODUCTS

a. **Event-Oriented Management**. . .The Department shall.....not arbitrary calendar dates.

b. **HIERARCHY OF MATERIEL ALTERNATIVES**. In response to operational ...
.....observe the following hierarchy of alternatives:

(1) the procurement (including modification) of commercially available systems or equipment, the additional production (including modification) of already-developed U.S. military systems or equipment, or allied systems or

ALLIED SYSTEMS OR EQUIPMENT.

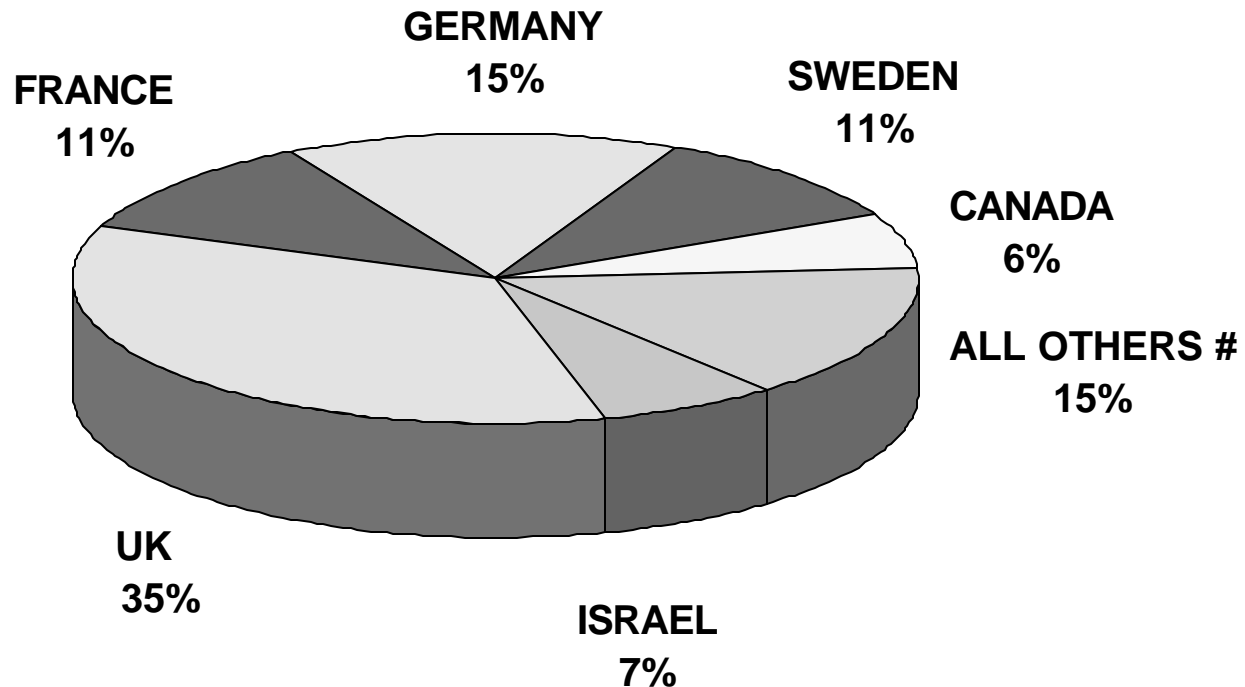
(2) A COOPERATIVE DEVELOPMENT PROGRAM WITH ONE OR MORE ALLIED NATIONS.

(3) A NEW JOINT-SERVICES DEVELOPMENT PROGRAM.

(4) A NEW SERVICE-UNIQUE DEVELOPMENT PROGRAM.

HISTORICAL PERSPECTIVE (FY 1980 - 2000)

FCT PROJECT FUNDING % BY COUNTRY*

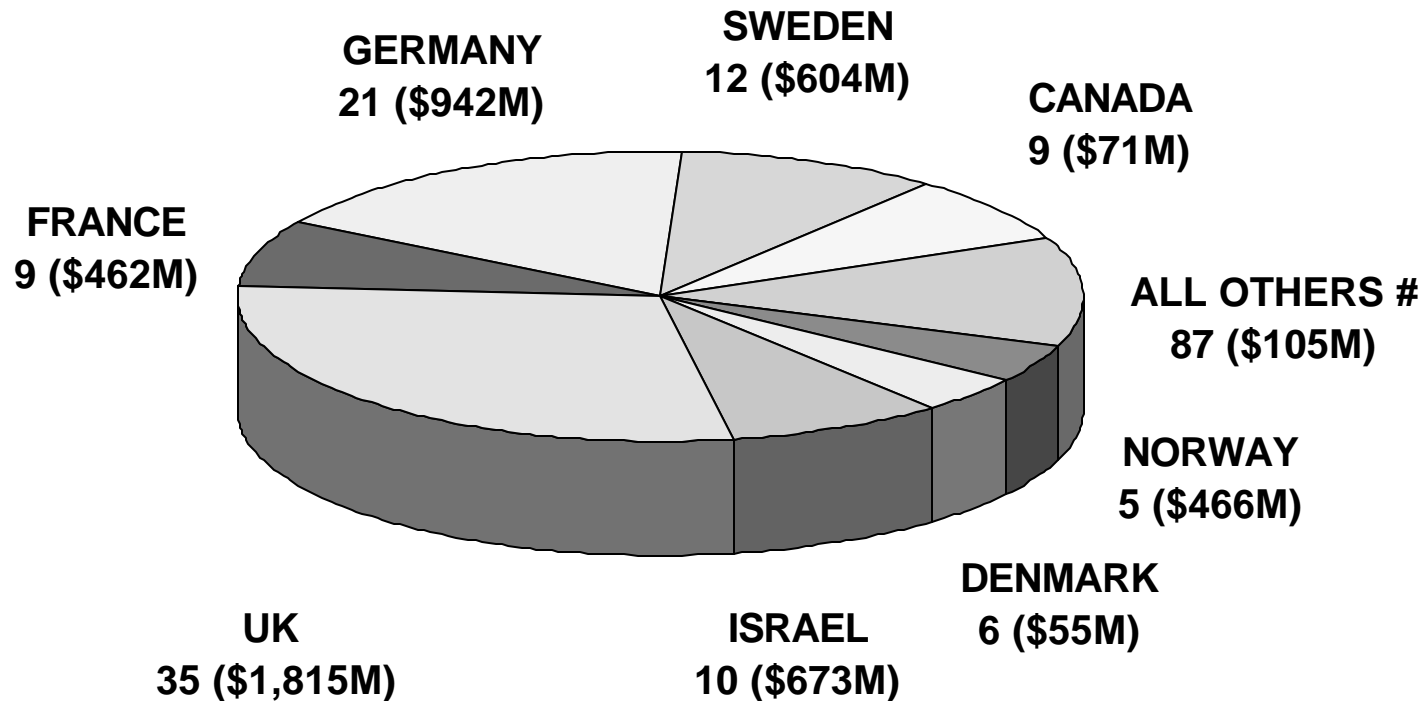


* CALCULATION IN FY 00 CONSTANT YEAR DOLLARS

AUSTRALIA, AUSTRIA, BELGIUM, DENMARK, FINLAND, ITALY, JAPAN, NETHERLANDS, NORWAY, RUSSIAN FEDERATION, REPUBLIC OF SOUTH AFRICA, REPUBLIC OF KOREA, SPAIN, SWITZERLAND, UKRAINE

HISTORICAL PERSPECTIVE (FY 1980 - 2000)

FCT PROCUREMENTS BY COUNTRY (SUCCESSFUL PROJECTS AND PROCUREMENT VALUE) *

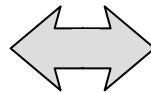
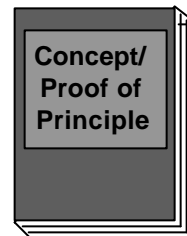
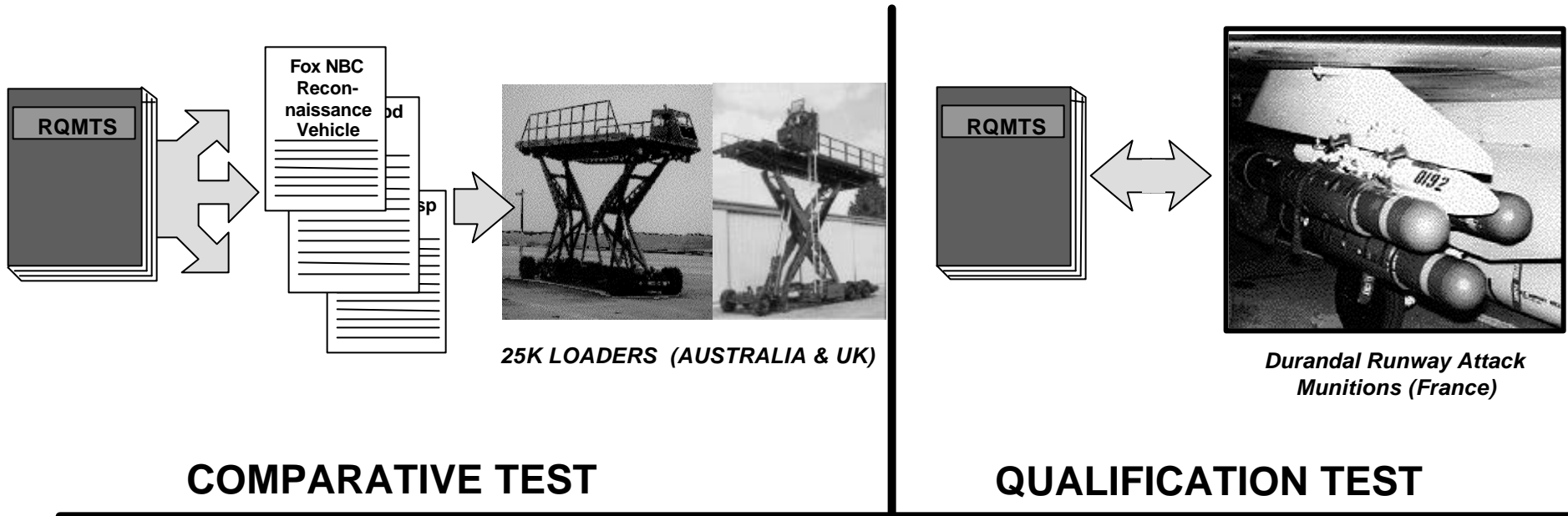


* ALL AMOUNTS IN FY00 CONSTANT YEAR DOLLARS

AUSTRALIA, AUSTRIA, BELGIUM, ITALY, JAPAN, RUSSIAN FEDERATION, REPUBLIC OF SOUTH AFRICA, SWITZERLAND

CATEGORIES OF FCT PROJECTS

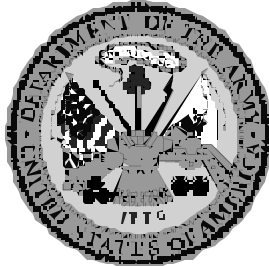
TEST TO PROCURE - HIGHEST PRIORITY



K-36 Ejection Seat (Russian Federation)

TECHNICAL ASSESSMENT (NO INTENT TO PURCHASE - LOWEST PRIORITY)

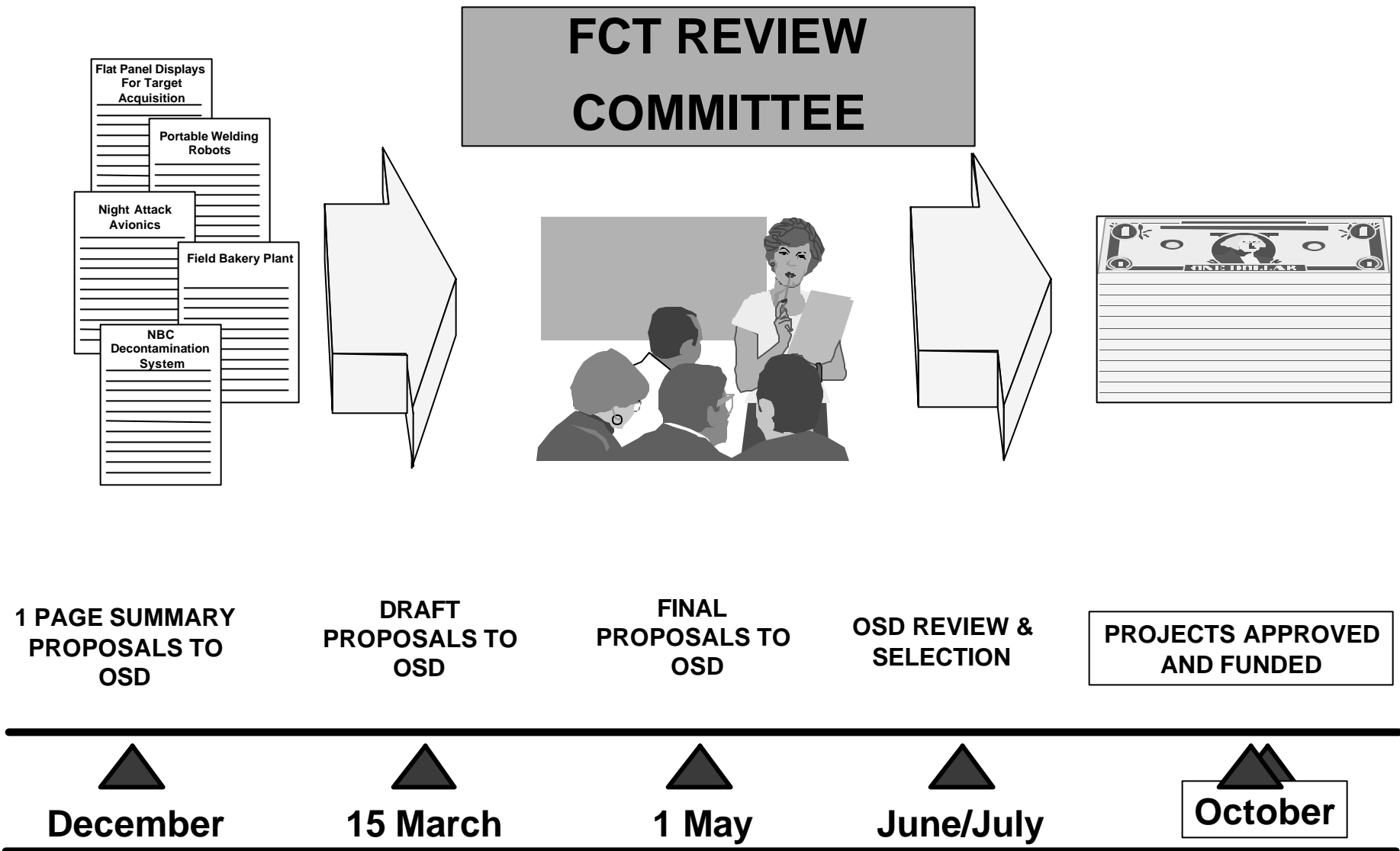
FCT TEST EXECUTION



84MM Carl Gustaf M3 RAAWS (Sweden)

**SPONSORS (ARMY, NAVY, MARINES,
AIR FORCE, USSOCOM)
PLAN AND CONDUCT THE TESTING**

ANNUAL FCT CYCLE



FCT MEASURES OF SUCCESS



**SALES &
PARTNERSHIPS**



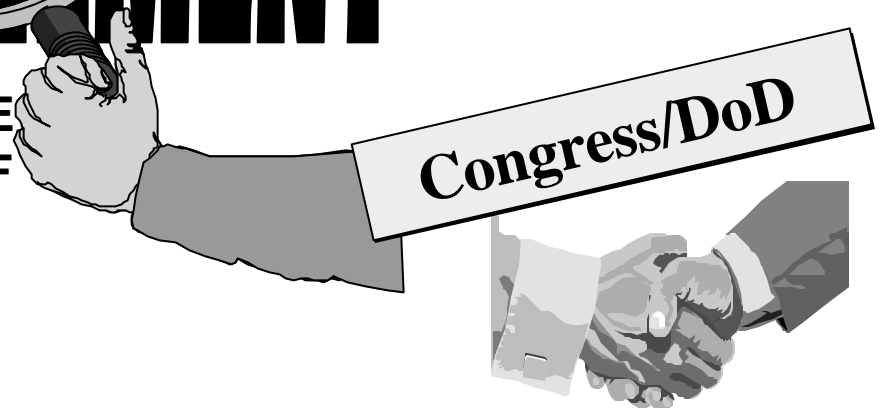
**RDT&E COST
AVOIDANCE**

PROCUREMENT

**TESTING THE
RIGHT STUFF
WELL**



**ACCELERATED
FIELDING**



**COMMITMENT TO
"TWO-WAY STREET"**

EXAMPLES OF RECENT FCT PROCUREMENTS

NEXT GENERATION SMALL LOADER-AUSTRALIA-AIR FORCE-2000



JOINT SERVICE COMBAT SHOTGUN-GERMANY/ITALY-USMC-2000

RDX/HMX EXPLOSIVES QUALIFICATION-NORWAY-NAVY-2000



GROUND & VEHICLE MOUNTING SYSTEM-GERMANY-ARMY-2000

F-15 600 GALLON FUEL TANKS-ISRAEL-AIRFORCE-1999



ATMOSPHERIC DIVING SUIT-CANADA-NAVY-1999

UNCOOLED THERMAL IMAGER-SWEDEN-AIR FORCE-1999



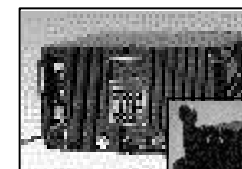
EAGLE VISION AND RENAISSANCE VIEW EAGLE VISION UPGRADE-
FRANCE/CANADA-AIR FORCE-1998, 1999



NBC ANALYSIS SYSTEM-DENMARK-NAVY/USMC-1998

LEGUAN HEAVY ASSAULT BRIDGE-GERMANY-ARMY-1998

MOBILE SUBSCRIBER UHF RADIOS-CANADA, ISRAEL-ARMY-1998



MARITIME CRAFT AIR DELIVERY SYSTEM-UK-SOCOM-1998/99



ALUMINUM ROADWHEELS FOR AAV-UK-MARCOR-1999



AERIAL TARGETS TESTED IN FCT



ROCKET POWERED TARGET [ROBOT-X],
CANADA

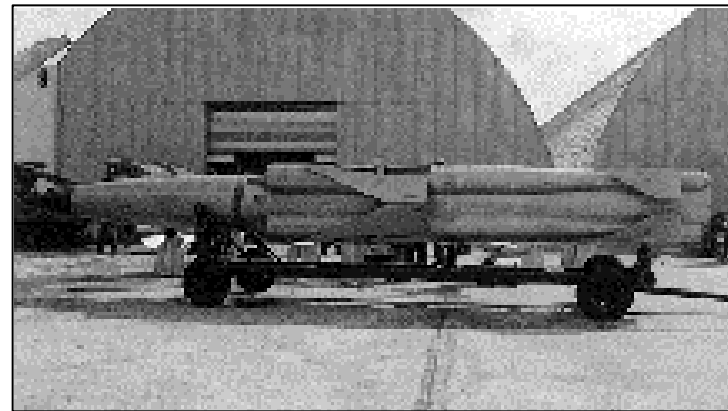
SEA PETREL TARGET, UK

LOW COST TARGETS, ITALY, FRANCE, UK

NATO TARGETS & ENGINES, ITALY, FRANCE, UK



MA-31, RUSSIAN FEDERATION



SS-N-22, RUSSIAN FEDERATION

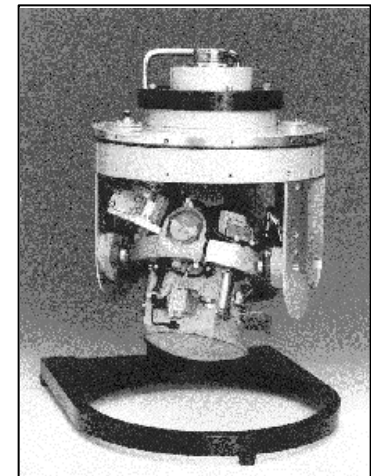
UAVs/PAYLOADS TESTED IN FCT

CL-227 (SENTINEL) REMOTE PILOTED VEHICLE, CANADA



RAVEN AND SPRITE REMOTE
PILOTED VEHICLES, UK

Z- ELECTRO OPTICAL PAYLOAD FOR UAVs, ISRAEL



RANGE-RELATED AIRCRAFT IMPROVEMENTS TESTED IN FCT



INFRARED/UV THREAT
STIMULATOR - UK

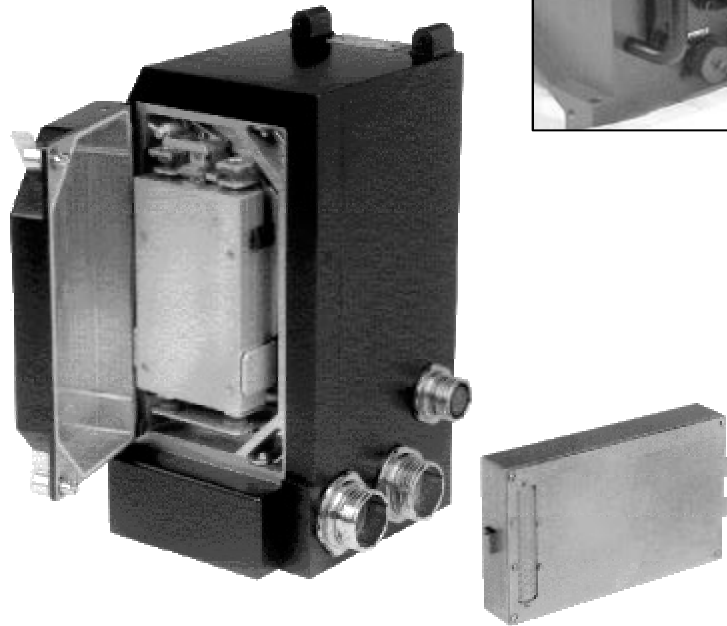


PLASTIC PRACTICE BOMB - UK

AERIAL TARGET VECTOR SCORING - UK

VIDEO CAMERA SYSTEM - UK

BDU-33 PRACTICE BOMB - AUSTRALIA



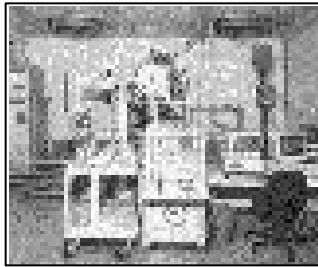
AIRBORNE VIDEO RECORDER/REPLAY SYSTEM - UK

IMPROVED TEST CAPABILITIES

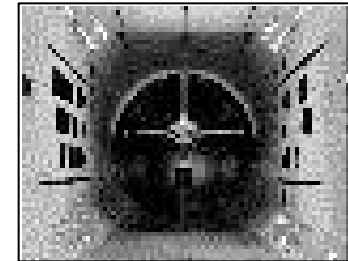


WIND TUNNEL INTERNAL FORCE BALANCES
- FR, GE, NETH, UK

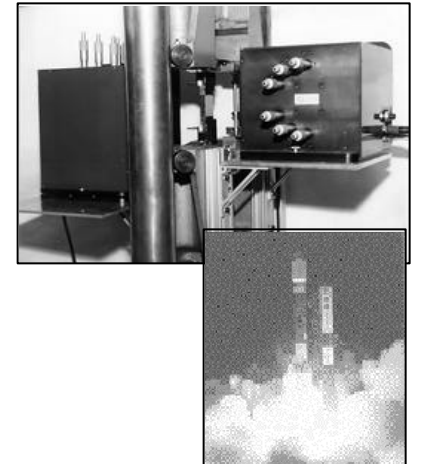
PRESSURE SENSITIVE PAINT - RUSSIA



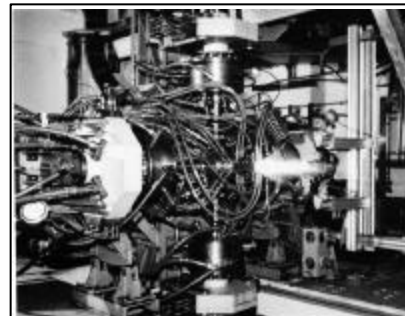
DIELECTRIC MEASUREMENT
EQUIPMENT - FRANCE



MULTISCANNER FOR AGING & SURVEILLANCE - GERMANY
BONDLIN ENERGY MEASUREMENT EQUIPMENT - GERMANY



ARC HEATER MANIFOLD - FRANCE



FCT AND MINE CLEARANCE TESTING



INTERIM VEHICLE METALLIC MINE DETECTOR
SYSTEM - SOUTH AFRICA



MINE PROTECTED CLEARANCE
VEHICLE - SOUTH AFRICA

AARDVARK FLAIL UNIT - UK



ANTI-MAGNETIC MINE ACTUATING DEVICE - ISRAEL

FCT AND INSENSITIVE MUNITIONS TESTING

LESS SENSITIVE RDX - FRANCE



RDX/HMX EXPLOSIVES QUALIFICATION - NORWAY

TACTICAL AREA SURVEILLANCE SYSTEM (TASS) ITEMS TESTED IN FCT



LONG-RANGE PASSIVE IR
SENSOR - AUSTRALIA



PORTABLE INTRUSION DETECTION
SENSOR CABLE - CANADA

AUTOMATIC DETECTION INFRARED
SYSTEM - ISRAEL



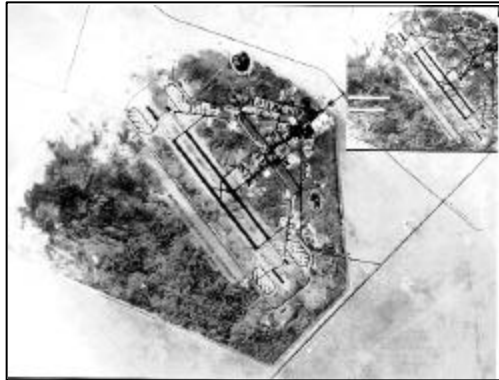
UNATTENDED GROUND IMAGER-ISRAEL



UNCOOLED THERMAL IMAGER-SWEDEN



FCT ITEMS WITH TEST RANGE APPLICATION



SPOT SATELLITE DIGITAL IMAGERY-FRANCE



25K SMALL LOADER-AUSTRALIA



HIGH-PRESSURE PURE AIR GENERATOR-UK

OTHER FCT ITEMS WITH POTENTIAL RANGE APPLICATION



IMPROVED PRACTICE BOMB RELEASE UNIT- UK

MUNITIONS EJECTOR RELEASE UNITS - GE, FR

AUTOMATIC CHEMICAL AGENT
DETECTOR ALARM - UK



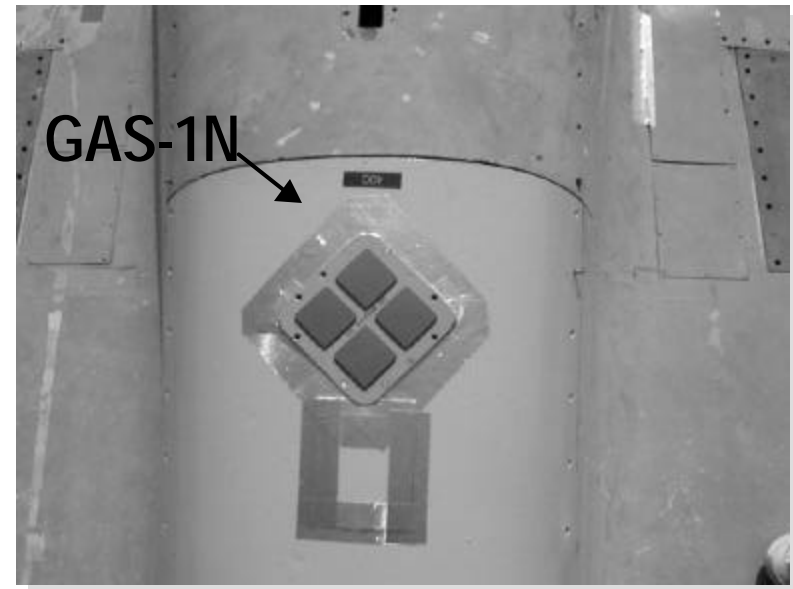
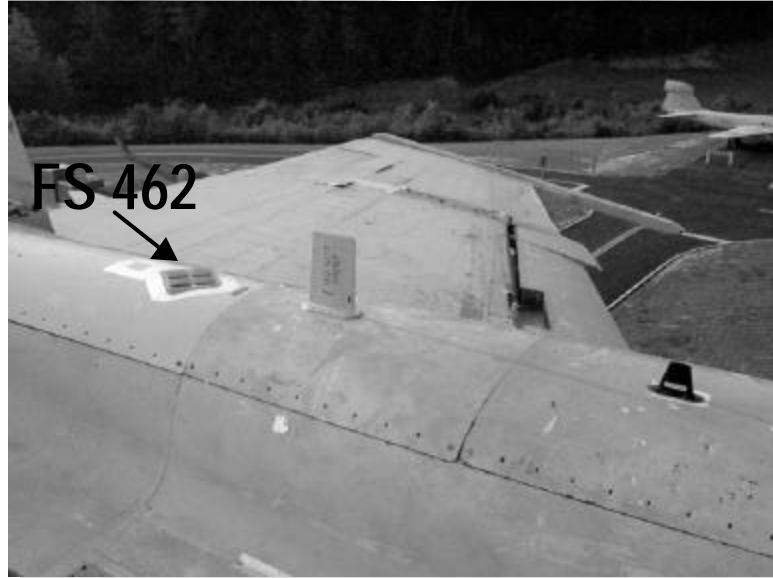
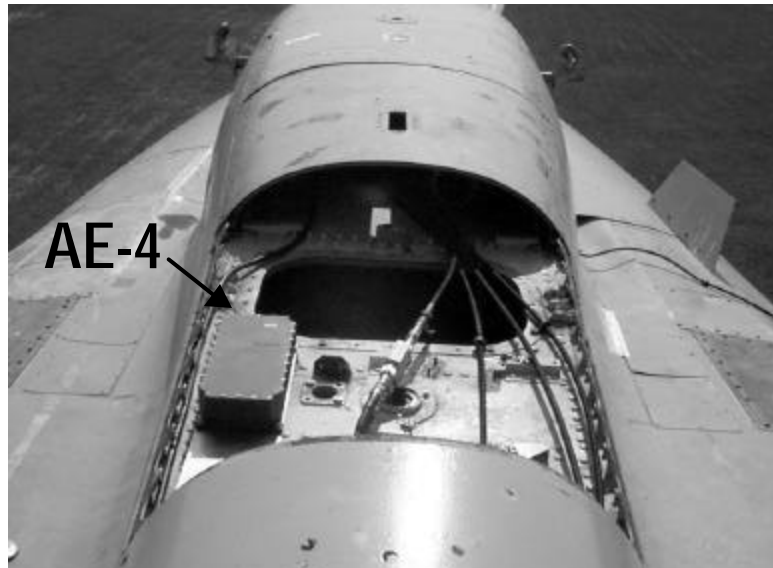
IMPROVED CHEMICAL AGENT
MONITOR - UK

LIGHTWEIGHT CHEMICAL
AGENT DETECTOR - UK

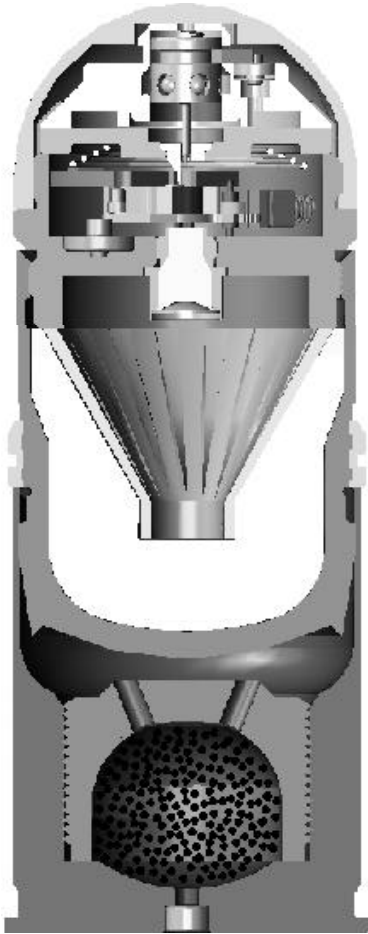


MORE USEFUL FCT ITEMS FOR RANGES

GAS-1N Measurements on F/A-18



MORE USEFUL FCT ITEMS FOR RANGES-IN THE FUTURE



40MM DUD REDUCING FUZE

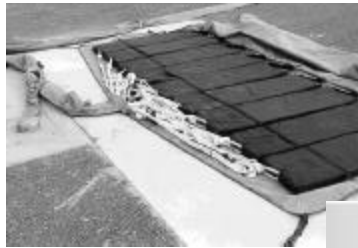
MECHANICAL DUD-REDUCING FUZE-
ACHIEVES <1% DUD RATE EVEN IN SNOW
OR SOFT SAND



MINECAT MINE CLEARANCE VEHICLE- FLAIL SYSTEM FOR MINE CLEARANCE

MORE USEFUL FCT ITEMS FOR RANGES-IN THE FUTURE

WIRELESS COMMUNICATIONS
SYSTEMS & COMPONENTS-VARIOUS COUNTRIES



EMERGENCY AIRCRAFT
ARRESTING SYSTEM-FRANCE



CONCLUSION

- **What is good for our Allies and friends is good for the United States**
- **Leveraging the global investment in technology frees our dollars for the pursuit of other goals**

DISCUSSION

WE NEED YOUR HELP:

- WHILE OUR FOCUS IS ON THE WARFIGHTER, THERE MAY BE OPPORTUNITIES FOR FCT PROJECTS THAT IMPROVE RANGE CAPABILITIES WHILE SERVING OUR PRIMARY CUSTOMER
- FCT TESTS ARE SMALL FOR RANGES BUT HAVE HIGH VISIBILITY IN OSD, CONGRESS, AND IN THE INTERNATIONAL ARENA
- WE USUALLY CAN BE VERY FLEXIBLE, BUT SOME REQUIREMENTS CAN PROVE CHALLENGING FOR RANGE SCHEDULING

DISCUSSION (CONT.)

- **LEVERAGING THE GLOBAL INVESTMENT IN TECHNOLOGY FREES OUR DEFENSE DOLLARS FOR THE PURSUIT OF OTHER GOALS**

MY ADVICE TO YOU:

- **LOOK FOR THE COST DRIVERS**
- **CONSIDER WHETHER SOMEONE ELSE MIGHT HAVE A BETTER, CHEAPER SOLUTION**
- **IF YOU'RE WILLING TO ADOPT SOMEONE ELSE'S SOLUTION, CALL FCT**

FCT DIRECTLY SUPPORTS THE WARFIGHTER

***EQUIPMENT TESTED AND EVALUATED BY FCT
HELPS THE WARFIGHTER ACCOMPLISH
THE MISSION WHILE SAVING LIVES***

- **COMBAT SUPPORT BOATS - UK**
used to emplace bridging on swollen Sava River during early Bosnia operations. →
- **SPOT SATELLITE DIGITAL IMAGERY - France**
provides near real-time pictures to pilots before departing on combat missions. →
- **EAGLE VISION GROUND STATION - France, Canada**
provides mission rehearsal and planning capabilities using commercial satellite imagery.
- **CHEMICAL AGENT MONITOR - UK**
provides chemical agent detection and monitoring capabilities.
- **TRANSPORTABLE RECOMPRESSION CHAMBER - Australia**
provides anti-armor protection. →
- **2KW TACTICAL GENERATOR & MULTIFUEL BURNER- Canada**
satisfies mobile power requirements for units in the field, eliminates dependence on gasoline.



HOW TO CONTACT THE FCT OFFICE

OSD - Colonel (s) Palmer, USAF (703) 602-3740, Fax (703)602-3748

Linda.Palmer@osd.mil

- Lt Col (s) Jim Rake, USAF (703) 602-3743

James.Rake@osd.mil

<http://www.acq.osd.mil/sts/fct/>

Air Force - Major John Ryan, USAF (703) 588-8926/8945

Army - Al Trawinski, Tanya Litvinas (703) 617-4712/3219

Navy/Marine Corps - Michael Locke (202) 764-2448;

Shawn Prablek (703) 784-3578

USSOCOM - LTC Spellissy, USA (813) 828-9426